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(54) Title:	METHODS FOR IDENTIFYING, CHARACTERIZING, AND EVOLVING CELL-TYPE SPECIFIC CIS REGULATORY ELEMENTS		

## (57) Abstract

The invention provides methods for efficient and rapid identification of cis-acting nucleic acid sequences that act in a cell-type specific manner to stimulate or repress the expression of linked genes or other neighboring sequences. The invention also provides methods for evolving novel regulatory sequences by *in vitro* manipulation of naturally occurring or synthetic cis-acting nucleic acid sequences followed by screening and counterscreening steps. Furthermore, the invention provides methods for determining the mechanism by which cell-type specific cis regulatory sequences confer cell-type specific expression. Also provided are diagnostic methods based on the use of cell-type specific cis regulatory sequences.

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